ABSTRACT OF THE DISCLOSURE

A method for preventing a substrate W from being contaminated by particles are provided, where the substrate is held horizontally, by means of holding means, in an environment having a specified cleanliness. The method comprises the step of flowing clean gas, by means of gas flowing means along the top surface of the substrate at a specific relative horizontal speed with respect to the top surface of the substrate, such that a laminar boundary layer, a transition layer, and/or turbulent boundary layer, of the clean gas are formed all over an entire area of the top surface of the substrate. In this method, the gas within the laminar boundary layer, a transition layer, and/or turbulent boundary layer, of clean gas may be considered as a viscous fluid. Thus, even if particles are existing and floating in the environment, where the substrate is disposed, and falling towards the substrate, the particles falling onto the substrate are blocked with the viscous fluid layer existing over the substrate. In other words, this viscous fluid layer functions as a protective coating or layer, thereby preventing the substrate from being contaminated by the particles.